



# **Introduction to the DoD-CDC Collaborative Adverse Childhood Experiences Study (CACES)**

**Charles C. Engel, Jr., MD, MPH**

**Lieutenant Colonel, Medical Corps, US Army  
Director, DoD Deployment Health Clinical  
Center**

**Associate Professor of Psychiatry  
Uniformed Services University of the Health  
Sciences, Bethesda**

# Questions for the Board

- ♠ **Given that the bulk of ACE research to date is cross-sectional, please provide your opinion on the efficacy of the ACE as a population health metric**
- ♠ **If the Board considers the ACE a useful population metric for military service members, when does the Board think it is best to assess this metric in military personnel?**
- ♠ **Provide recommendations regarding further evaluation or additional research (if any) that the DoD should conduct before or after implementing the ACE as a population metric**

# DoD-CDC Collaborative ACE Study



## Overview

- ♠ Some background
- ♠ CACES objectives
- ♠ Future plans
- ♠ Conclusions



# ACE surveillance - Promise and potential



- ♠ Recent DoD efforts to complete general health and mental health surveillance in US military populations date to at least 1997
- ♠ Cross-sectional studies in civilian and military samples have regularly identified robust associations between retrospective self-reported adverse childhood experiences and various measures of general and mental health and health behaviors.

# ACE surveillance - Promise and potential



- ♠ If the military could predict who will develop psychological illness due to ACEs:
  - military personnel and commanders would benefit during conflict
  - veterans would have fewer health problems following a war

# **Caveats - Psychological screening example**



**calls for widespread mental health screening are not new**

- ♠ widespread psychological screening based on psychiatric interviews were a major failure in the US during World War II (Shephard 2003)**
  - two million men were rejected as vulnerable**
  - many rejected were later reenlisted and most made satisfactory soldiers (Jones et al, 2003)**
  - GEN George Marshall stopped program in 1944**

# Screening for psychological illness in military personnel \*



- 1. identified conditions should be important health problems**
- 2. screening tests should be clinically, socially, and ethically acceptable**
- 3. screening tests should be simple, precise, and validated**

**\* Rona et al, JAMA, 200**

# Screening for psychological illness in military personnel \*



- 4. high-quality research evidence should demonstrate the effectiveness of screening in reducing psychiatric morbidity**
- 5. adequate staffing and facilities for all aspects of psychological screening programs are critical**
- 6. benefits from the screening program should outweigh potential harms**
- 7. consider the available alternative approaches to mass screening**

**\* Rona et al, JAMA, 200**



# ACE surveillance - Apparent scientific gaps



- ♠ essentially no longitudinal studies completed to date
- ♠ ACE related resilience factors are unclear
- ♠ evidence-based clinical interventions to reduce ACE-related morbidity are unclear

# ACE surveillance - Methodologic challenges



- ♠ potential for bias in retrospective self-reporting of adverse childhood experiences
- ♠ ACE questions are *sensitive*
- ♠ actuarial predictions are likely to misclassify many
- ♠ uses of data are not yet clear and are likely to affect...
  - acceptability of self-reporting
  - validity of self-reporting

# Ethical uncertainties



- ♠ ACE questions may be considered unfair to women and some other demographic groups
- ♠ ACEs from one perspective -  
“The government has a responsibility to insure that excessively vulnerable people are not sent to war.”
- ♠ ACEs from another perspective -  
“Every individual has the right to pursue their own goals and dreams.”

# Available alternative approaches



- ♠ available public health approaches may be implemented without ACE surveillance
- ♠ studies of social and ethical acceptability
  - military personnel
  - family members
  - society at large
- ♠ longitudinal epidemiologic studies
- ♠ intervention studies

# ACE surveillance - What harm?

- ♠ potential to stigmatize
- ♠ potential to waste programmatic resources
- ♠ potential to reject sound motivated personnel
- ♠ potential to misclassify
- ♠ potential loss of public confidence if issue is not competently addressed

# **Key points - ACE surveillance in the military**

- ♠ **Office of the Assistant Secretary of Defense for Health Affairs is interested in ACE surveillance**
- ♠ **ACE surveillance may improve**
  - **fighting force effectiveness during war**
  - **veteran health after war**
- ♠ **uncertainties exist in the scientific, methodological, and ethical domains**
- ♠ **potential for harm exists**

# **Overarching CACES objective**

**Provide a balanced, multiagency,  
and maximally evidence-based  
appraisal of the use of ACE  
surveillance as a US force health  
protection tool**



# **CACES components**

- ♠ Conduct an expert review panel assessment of issues and questions raised by the use of ACE questions in DoD military health surveillance efforts**
- ♠ Initiate empirical studies of the feasibility and acceptability of DoD military ACE surveillance**
- ♠ Review and report on WRAIR & NHRC efforts to pilot ACE surveillance**



# CACES Expert Review Panel

- ♠ **multiagency representation (CDC, DoD, VA)**
- ♠ **multidisciplinary expertise**
  - **psychology/psychiatry**
  - **public health & epidemiology**
  - **ethics & forensics**
  - **women's health**
  - **occupational medicine**
  - **primary care**

# **CACES deliverables**

- 1. Review of existing scientific literature on ACEs and health focusing on findings from longitudinal studies**
- 2. Development of an ethical and forensic framework from which to consider ACE surveillance within the military**
- 3. Preliminary report for OASD/HA & peer-reviewed publication of both 1 & 2 above**

# CACES timeline

- ♠ **currently assembling a comprehensive literature database**
- ♠ **currently approaching potential expert review panel members**
- ♠ **initiating a preliminary qualitative review of military personnel and family member attitudes regarding ACE surveillance**
- ♠ **planning October 2005 expert review panel meeting in Washington DC**
- ♠ **final reports due June 2006**